



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,550	07/16/2003	Jong-Kook Kang	P-0566	5940
34610	7590	04/21/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			SANTIAGO CORDERO, MARIVELISSE	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/619,550	Applicant(s) KANG, JONG-KOOK	
	Examiner Marivelisse Santiago-Cordero	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8,10-12 and 14-18 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,5-8,10-12 and 14-18 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/17/06 has been entered.

3. Accordingly, claims 1, 3, 5-8, 10-12, and 14-18 are pending.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 3, 5-8, 10-12, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art in view of Pardhy et al. (hereinafter "Pardhy"; Pub. No.: US 2003/0065767).

Regarding claim 1, Applicant's Admitted Prior Art discloses a method for measuring a service data amount received or transmitted at a terminal equipment (TE) (Fig. 2, reference 10) using a terminal (Fig. 2, reference 20) in a call connection networking between the TE and a network (Fig. 2, reference 30) comprising:

monitoring packets received or transmitted between the TE and the network at the terminal to determine if a monitored received or transmitted packet corresponds to a control packet indicating a control protocol setup state of the TE is established (Fig. 2; note that steps S1 through S3 and S5 through S7 are all control steps; also note that a control packet indicating a control protocol setup state of the TE is established is inherently present because otherwise the communication cannot be established. In order for the communication to be successfully established, it is inherent that the system knows if the packets are control packets or not);

cumulatively counting a number of all packets (Description of the Background of Art: page 3, lines 11-14), excluding packets added during a protocol stack setting process (Fig. 2; Description of the Background of Art: page 3, lines 11-14; note that the packets are counted from the point when the communication channel was set between the MT 20 and the PDSN 30; hence, excluding packets added during a protocol stack setting process, i.e., steps S1 through S3), received or transmitted until every protocol session of the TE is released if the control packet indicates the control protocol setup state of the TE is established (Fig. 2; Description of the Background of Art page 3, lines 11-15; note that the packets are counted from the point when the

communication channel was set between the MT 20 and the PDSN 30 to the point of releasing, i.e., steps S5 through S7).

Applicant's admitted prior art fails to disclose displaying the counted number of packets on a display of the terminal.

However, Pardhy, in a terminal (Fig. 1, reference 10) in a call connection networking between the TE (Fig. 1, reference 14) and a network (Fig. 1, reference 16) discloses displaying the counted number of packets on a display of the terminal (Fig. 4; paragraphs [0030]-[0031]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to display on the terminal of Applicant's admitted prior art the counted number of packets as suggested by Pardhy for the advantages of providing a user with a more accurate measurement of the services used, taking in consideration only the traffic; thereby, allowing the user to manage the data service more efficiently, thus, the user can estimate the associated data service charges accrued whenever necessary.

Regarding claim 3, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the count packets displayed on the screen of the terminal include only data in a payload of a transmission protocol layer (Description of the Background of Art: page 3, lines 11-14). In addition, in the obvious combination, Pardhy discloses wherein the terminal parses, i.e., breaking down or separating into components, the received data packets and extracts data pertinent to it (Abstract: last sentence; paragraphs [0025] and [0036]), i.e., count packets displayed on the screen of the terminal include only data in a payload of a transmission protocol layer. Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to include only data in a payload of a transmission protocol layer as suggested by

Pardhy because it would extract only data that is pertinent to the terminal (Pardhy: paragraph [0036]); in addition that including only a payload of a transmission protocol layer was notoriously well-known at the time of invention by applicant since packets are reassembled into their original file by the transmission protocol layer at the receiving end.

Regarding claim 5, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the terminal operates as a modem of the TE (Description of the Background of Art: page 2, lines 11-12).

Regarding claim 6, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the terminal is a mobile terminal (Description of the Background of Art: page 2, line 11).

Regarding claim 7, in the obvious combination, Pardhy discloses further comprising storing the counted number of packets in a non-volatile memory of the terminal (Abstract: last sentence; paragraphs [0024] and [0036]; note that the non-volatile memory is inherently present or an obvious expedient thereof in order for the content to remain in the terminal e.g., after powering off), and allowing a user to delete or initialize the counted number of packets via a user interface (Figs. 1-4; paragraphs [0016] and [0033]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to store the counted number of packets in a non-volatile memory of the terminal and allowing a user to delete or initialize the counted number of packets via a user interface because it would allow the content to remain in the terminal e.g., after powering off; and allowing the user to manage the data service more efficiently, in addition to making it user-friendlier.

Regarding claim 8, in the obvious combination, Pardhy discloses wherein the user searches the stored counted number of packets by a search function through the user interface (Figs. 1-4; paragraph [0016]). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to permit the user to search the stored counted number of packets by a search function through the user interface for the advantages of making it user-friendlier and allowing the user to manage it more efficiently.

Regarding claim 10, Applicant's Admitted Prior Art discloses a method for measuring a service data amount in a call connection networking between a terminal equipment (TE) (Fig. 2, reference 10) and a network (Fig. 2, reference 30), comprising:

monitoring packets received or transmitted between the TE and the network at a terminal (Fig. 2, reference 20) to determine if a monitored received or transmitted packet corresponds to a control packet indicating a control protocol setup state of the TE is established (Fig. 2; note that steps S1 through S3 and S5 through S7 are all control steps; also note that a control packet indicating a control protocol setup state of the TE is established is inherently present because otherwise the communication cannot be established. In order for the communication to be successfully established, it is inherent that the system knows if the packets are control packets or not);

measuring an amount of provided data between the TE and the network when the control packet indicates a channel for data transmission is set between the TE and the network (Description of the Background of Art: page 3, lines 6-14);

wherein measuring the amount of provided data comprises:

counting a number of received or transmitted payload portions (Description of the Background of Art: page 3, lines 11-14), and

wherein the measurement of the data amount is performed from a point when the transmission is set to a point when every protocol session of the TE is terminated (Description of the Background of Art: page 3, lines 11-14).

Applicant's Admitter Prior Art fails to explicitly disclose removing a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets; and displaying the measured amount of data on a screen of the terminal, and counting a number of received or transmitted payload portions as the measured amount of data.

However, Pardhy, in a terminal (Fig. 1, reference 10) in a call connection networking between the TE (Fig. 1, reference 14) and a network (Fig. 1, reference 16) discloses removing a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets (note that Pardhy discloses wherein the terminal parses, i.e., breaking down or separating into components, the received data packets and extracts data pertinent to it (Abstract: last sentence; paragraphs [0025] and [0036]), i.e., removing a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets); and displaying the measured amount of data on a screen of the terminal (Fig. 4); and counting a number of received or transmitted payload portions as the measured amount of data (Fig. 4; paragraphs [0030]-[0031]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to remove a header and tailer from said packets received or transmitted between the TE and the network such that the measured amount of provided data corresponds only to the payload portions of the packets as suggested by Pardhy because it would extract and remain only with data that is pertinent to the terminal (Pardhy: paragraph [0036]) and displaying the measured amount of data on a screen of the terminal for the advantage of allowing the user to manage the data service more efficiently, thus, the user can estimate the associated data service charges accrued whenever necessary.

Regarding claim 11, in the obvious combination, Pardhy discloses wherein the measurement of the amount of provided data is performed by the terminal (Fig. 5; paragraphs [0023] and [0030]-[0031]).

Regarding claim 12, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the payload portions comprise a payload of a transmission protocol layer (Description of the Background of Art: page 3, lines 11-14). In addition, in the obvious combination, Pardhy discloses wherein the terminal parses the received data packets and extracts data pertinent to it (Abstract: last sentence; paragraphs [0025] and [0036]), i.e., the payload portions comprise a payload of a transmission protocol layer). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to incorporate wherein the payload portions comprise a payload of a transmission protocol layer as suggested by Pardhy because it would extract only data that is pertinent to the terminal (Pardhy: paragraph [0036]) and because it was notoriously well-known in the art at the time the invention was made

Art Unit: 2617

that packets are reassembled into their original file by the transmission protocol layer at the receiving end.

Regarding claim 14, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the terminal operates as a modem of the TE (Description of the Background of Art: page 2, lines 11-12).

Regarding claim 15, Applicant's Admitted Prior Art discloses a method for measuring a service data amount using a mobile terminal (Fig. 2, reference 20) in a call connection networking between a terminal equipment (TE) (Fig. 2, reference 10) and a network (Fig. 2, reference 30) comprising:

determining, by the mobile terminal, if a received or transmitted packet corresponds to a control packet indicating a control protocol setup state of the TE is established (Fig. 2; note that steps S1 through S3 and S5 through S7 are all control steps; also note that a control packet indicating a control protocol setup state of the TE is established is inherently present because otherwise the communication cannot be established. In order for the communication to be successfully established, it is inherent that the system knows if the packets are control packets or not);

starting to count only payload portions of packets received or transmitted between the TE and the network when determining the control packet indicates the control protocol setup state of the TE is established (Fig. 2; Description of the Background of Art: page 3, lines 11-14; note that the packets are counted from the point when the communication channel was set between the MT 20 and the PDSN 30; hence, excluding packets added during a protocol stack setting process, i.e., steps S1 through S3);

Applicant's Admitted Prior Art fails to disclose starting to count by the mobile terminal; starting to count only payload and displaying, on the mobile terminal, the number of counted received and transmitted payload portions when the protocol setup state of the TE is released.

However, Pardhy, in a terminal (Fig. 1, reference 10) in a call connection networking between the TE (Fig. 1, reference 14) and a network (Fig. 1, reference 16) discloses starting to count by the mobile terminal (Figs. 1 and 5; paragraphs [0030]-[0031]); starting to count only payload (note that the terminal parses, i.e., breaking down or separating into components, the received data packets and extracts data pertinent to it (Abstract: last sentence; paragraphs [0025] and [0036]), thus, starting to count only payload); and displaying, on the mobile terminal, the number of counted received and transmitted payload portions when the protocol setup state of the TE is released (Fig. 4; paragraphs [0030]-[0031]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to starting to count by the mobile terminal of Applicant's Admitted Prior Art; starting to count only payload and displaying, on the mobile terminal, the number of counted received and transmitted payload portions when the protocol setup state of the TE is released as suggested by Pardhy for the advantages of providing a user with a more accurate measurement of the services used, taking in consideration only the traffic; thereby allowing the user to manage the data service more efficiently, thus the user can estimate the associated data service charges accrued whenever necessary; in addition that counting only payload would extract only data that is pertinent to the terminal (Pardhy: paragraph [0036]).

Regarding claim 16, in the obvious combination, Applicant's Admitted Prior Art discloses wherein the terminal functions as a modem of the TE (Description of the Background of Art: page 2, lines 11-12).

Regarding claim 17, in the obvious combination, Pardhy discloses further comprising storing the counted number of packets in a non-volatile memory of the terminal (Abstract: last sentence; paragraphs [0024] and [0036]; note that the non-volatile memory is inherently present or an obvious expedient in order for the content to remain in the terminal e.g., after powering off), and allowing a user to delete or initialize the counted number of packets via a user interface (Figs. 1-4; paragraphs [0016] and [0033]).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to store the counted number of packets in a non-volatile memory of the terminal and allowing a user to delete or initialize the counted number of packets via a user interface because it would allow the content to remain in the terminal e.g., after powering off; and allowing the user to manage the data service more efficiently, in addition to making it user-friendlier.

Regarding claim 18, in the obvious combination, Pardhy discloses wherein the user searches the stored counted number of packets by a search function through a user interface included with the mobile terminal (Figs. 1-4; paragraph [0016]). Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to permit the user to search the stored counted number of packets by a search function through the user interface for the advantages of making it user-friendlier and allowing the user to manage it more efficiently.

Art Unit: 2617

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuzhiyil et al. (Patent No.: US 6,973,088) discloses packets corresponding to control packets indicating a control protocol setup state establishment between a TE and a network using a terminal.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSC 4/20/06

MSC



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER